

Factitious diarrhea

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Summary: The causes of diarrhea are legion. In any diagnostic problem a factitious etiology must be carefully considered. Three cases are presented, in two of which daily ingestion of prunes and prune juice was found to be the cause of chronic diarrhea. In the third case an edible oil product, Coffee Rich, was determined by dietary manipulation to be the cause, carrageenan possibly being the laxative principle.

Résumé: Cas de diarrhée factice

Les causes de la diarrhée sont légion. Devant le problème diagnostique, il faut toujours considérer soigneusement une étiologie factice. Nous présentons ici trois cas. Dans deux cas, il s'agissait d'une diarrhée chronique causée par l'ingestion quotidienne de pruneaux et de jus de pruneaux. Dans le troisième cas, il s'agissait d'une huile comestible, "Coffee Rich", par les manipulations diététiques; le carrageenan était probablement le principe laxatif en cause.

The differential diagnosis of diarrhea is extensive. It includes both primary disorders of the gastrointestinal tract and diseases of many other body systems that may secondarily affect gastrointestinal function. Iatrogenic factors such as complications of gastrointestinal surgery, radiation therapy and side effects of drug administration must also be considered. In addition, factitious causes have become more common over the last 10 years. The popular use of sorbitol¹ and ascorbic acid² has added to the ever-growing list of questions that must be put to the patient who presents with diarrhea. We have recently seen three interesting cases of factitious diarrhea.

Case reports

Case 1

A 68-year-old farmer was referred for investigation of chronic diarrhea. For nine years he had passed two to three loose, non-bloody stools daily. Two days after his admission to hospital his diarrhea spontaneously subsided and he began passing one formed stool daily. When asked

whether his hospital diet was in any way different from his home diet he replied "No, except that I'm not having my prunes." Nine years previously a friend had recommended prunes as a nutritious and "healthy" food. From that time on he had regularly eaten a large bowl of prunes each morning. Whereas his bowel habit had formerly been perfectly normal, he immediately began to have diarrhea which had persisted to the time of his admission. Despite the fact that the diarrhea had started at that time he had not seen the connection. He had not thought it necessary to mention this change in diet to his family doctor who prescribed for him pancreatic enzymes, which he took for nine years without benefit.

At the time of discharge from our hospital it was suggested to the patient that he should avoid prunes and prune juice completely. He was seen in follow-up five months later, at which time he reported that he had had no recurrence of his diarrhea.

Case 2

A 45-year-old housewife was referred for investigation of possible malabsorption. The patient had a history of an 8-lb weight loss and diarrhea for the year prior to admission. The diarrhea consisted of up to six loose, nonbloody stools daily. Her family doctor had found *Giardia lamblia* in her stool and had treated her with Flagyl (metronidazole) two weeks prior to admission. There had been no change in stool habit following this treatment. The patient was questioned about her dietary habits several times in hospital while investigation was proceeding. She specifically denied eating any prunes. However, a bottle of prune juice was observed at the bedside. The patient admitted to drinking 4 to 12 oz daily. She had been told that prune juice was good for her health and had not connected ingestion of this with her diarrhea. When the prune juice was discontinued stool habit returned to normal. There was no recurrence of the diarrhea during a two-month follow-up.

Comment: It is generally assumed that the lay public is aware of the laxative properties of prunes and prune juice. The foregoing two patients evidently were not. The laxative principle in prunes and prune juice is unknown. While some authors³ claim it is diphenylisatin, others have been unable to confirm this and suggest instead that the laxative principle is in the fraction containing magnesium.⁴ In any event, we now routinely enquire about the ingestion of prunes or prune juice in recording the history of a patient with diarrhea of undetermined etiology, lest we overlook another case of "dysprunia"!

Case 3

A 72-year-old man was referred for in-

vestigation of diarrhea of 2½ months' duration. All investigations in hospital yielded normal findings and the diarrhea disappeared spontaneously. There was no history of prune or prune juice ingestion. When the patient returned home his diarrhea recurred. He was then able to determine that the cause of his diarrhea was an edible oil product known as Coffee Rich, a cream substitute. Exacerbation and remission of the diarrhea were produced by its inclusion in and exclusion from his diet. After eliminating Coffee Rich from his diet he remained free of diarrhea during three months of follow-up.

Comment: Coffee Rich has several ingredients. In view of the normal results of studies on this patient it is difficult to incriminate most of them. The most interesting ingredient is carrageenan, which has been reported by some authors to produce experimental colitis in certain animals.⁵ There was no evidence of colitis in this patient. He has been advised to return for challenge studies at a later date.

Discussion

Iatrogenic disease refers to disease caused by the physician. Strictly speaking, factitious means artificial. In this sense, some iatrogenic diseases are also factitious, such as diarrhea due to antibiotics. However, we use the term "factitious disease" to mean disease caused by the patient, either knowingly or unknowingly. Malingerers may take laxatives to produce chronic diarrhea.⁶ The cases presented here likely represent a far greater segment of factitious disease, that is, diseases caused unknowingly by the patient. Since most of our foods now contain additives, about which we are poorly informed, it seems likely that many cases of unexplained diarrhea may be due to food additives. Furthermore, previous reports⁷⁻¹¹ indicate that factitious diseases are not confined to the gastrointestinal tract. We would do well to keep in mind the words of Addison (cited in ref. 8):

When I behold a fashionable table set out in all its magnificence, I fancy that I see gouts and dropsies, fevers and lethargies, with other innumerable distempers lying in ambush among the dishes.

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